

## INVESTMENT VALUATION AND PORTFOLIO ANALYSIS OF SELECTED BANKING COMPANIES IN INDIA

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DOI: [10.5281/zenodo.10616858](https://doi.org/10.5281/zenodo.10616858)

### Abstract

The banking industry has been the most rewarding to invest in. The fact that many banks report double-digit returns on equity makes it one of the most profitable sectors as well. The stocks of banks can be a wonderful method to diversify the portfolio because of their significant economic impact. The industry is one of the safest and most reliable to invest in. For a very long time, it has been a significant component of the Indian economy, and it will probably remain so for a very long time. In the Indian banking industry, there are many promising stocks, but not all of them make for excellent investments. In India, the banking industry has changed substantially throughout time. Before private sector and new generation banks were granted to enter and compete with them, public sector banks predominated this sector. The Indian Banking sector has experienced remarkable growth and It has actually had the world's fastest growth. Several elements contributed to the expansion of the Indian banking industry. The most significant factor is that Indian banks may now compete with major global financial organisations. This is due to the fact that many of the banks have improved since they were privatised in 1991 in terms of efficiency and streamlining. The rising demand for loans from both enterprises and individuals is another factor contributing to the success of Indian banks. Both economic expansion and the low interest rates that banks charge on their loans are accountable for this. Investors' active search for strong stocks to invest in at the present is not unexpected given that it seems like everyone wants to buy some great stocks before they rise even higher than they already have. Based on all these facts, this study made an attempt to study the significant of Investment valuation and portfolio analysis in Banking sector.

**Keywords:** Banking Industry, Portfolio Returns, Investment Valuation.

### INTRODUCTION

The Indian banking sector has experienced plenty of beneficial enhancements over the last ten years. Among the decision-makers who have assisted in strengthening banking industry regulation are the Reserve Bank of India (RBI), the Ministry of Finance, and a variety of regulatory agencies. A variety of measures, including profitability, growth, and non-performing assets (NPAs), also demonstrate the beneficial results in the banking sector. A large number of banks have emerged with impressive track records demonstrating value generation, expansion, and innovation. Improvements have been witnessed in the market valuation of the sector. Recently, the Indian banking industry has made unique banking models, comprising payment and financial banking organisations, accessible. In addition, the banking industry is

seen as the foundation of modern industries. In this study researcher identified Portfolio analysis and Investment valuation in Banking sector is significant at this stage.

The risk and return characteristics of individual securities are distinct. Risk is the phrase used to describe the variability of returns that can be expected in the future from a security. Considering that the majority of investors are risk adverse. If money is invested in multiple securities at once, it is hoped that the gains in each would offset any losses in any one security. Thus, holding multiple securities at once is an effort to spread out and reduce risk by not placing all of our eggs in one basket. As a result, rather than investing in just one investment, most investors prefer to invest in a portfolio of securities. A portfolio is a collection of securities held together as an investment. Diversification is the process of building such a portfolio. The risk associated with investments is being spread out and reduced. By holding a variety of securities across several industry groups, this is hoped to be accomplished. Any number of portfolios can be created from a given collection of securities. An intelligent investor would look for the portfolio that is the most effective among these. Only the predicted return and overall risk of the portfolio as a whole may be used to assess the efficiency of each portfolio. Consequently, a key stage in portfolio management is figuring out the projected return and risk of various portfolios. Analyzing your portfolio is the name of this process. S&P Bankex was employed in this study's portfolio analysis and investment valuation of the banking industry.

### **Statement Of The Problem**

India has emerged in the global map as a resilient economy. It surpassed several milestones and one of it is becoming the fastest growing economy among major developed and emerging economies. The World Bank revised India's 2022-23 GDP forecast upward to 6.9% from 6.5% in October 2022. It is not just the economy that is improving. Banks are also trying to improvise their balance sheets. The biggest challenge for the sector was the non-performing assets (NPAs), or bad loans. These NPAs were driven by weak private capital expenditure cycle and deteriorating corporate asset quality. The banking sector has reduced its NPAs in the past few years and provided for most of the legacy NPAs. Putting the worst of the NPAs behind, the banking sector fared well in the RBI stress test, which checks a bank's financial soundness and readiness to lend. India's banking sector now has a strong banking performance, comfortable capitalization level, and adequately provided NPAs. They are well-equipped to benefit from GDP growth. Supporting the healthy balance sheets of banks is a revival of corporate profitability in several sectors, especially capital-intensive sectors like metal and pharma. Improved corporate profitability hints that companies can repay their loans, thereby reducing the risk of higher NPAs for banks. This creates a conducive growth environment for banks and the economy. The banking and financial services sector has significant scope of growth through market penetration and digitization makes it possible. The growth of fintech will help the banking and financial services sector tap the large rural market and the growing internet-savvy youth population. The government reforms are creating a regulatory environment conducive to the growth of financially sound banking and financial services. This made us to study how top Indian banks are performing. There are many research carried out in this filled. The present study will focus on what kind of relationship exist between S&P Sensitivity Index with the selected Banks in India and

assess the returns on the Investment Valuation in Banking Companies. It also evaluates the selected Portfolios of Banking sector in India.

### Objectives Of The Study

- To find out the relationship between S&P Sensitivity Index with the selected Banks in India
- To Compare S&P Bankex with Top Performing Banks as per Market Capitalization.
- To assess the returns on the Investment Valuation in Banking Companies
- To evaluate the selected Portfolios of Banking sector in India.

### Hypotheses Of The Study

- ❖ There is statically significant relationship between S&P BSE Bankex and the performance of selected banks of India.
- ❖ There is statically significant relationship between the returns of S&P BSE Bankex and selected banks of India.

## RESEARCH METHODOLOGY

### Design of the Study:

The study is an exploratory in nature and it is completed based on the Secondary Data. For the purpose of research work, data were gathered from the official website of Bombay Stock Exchange and the published report from moneycontrol.com.

### Sources of Data Collection:

Data were gathered for Top performing banks on the basis of Top Volumes taken over by the banks in India and the same were compared with S&P BSE Bankex Index. The selected Top Performing Banking Companies for analysis are as follows:

**Table 1: Top Performing Banking Companies on the basis of Top Volume**

Security	TTQ	T/O Cr
HDFCBANK	1,73,545	27.49
STATE BANK OF INDIA	1,99,254	11.38
ICICIBANK	94,149	9.06
BANK OF BARODA	3,95,046	7.74
INDUSINDBANK	44,378	6.25
KOTAKBANK	17,270	3.06
FEDERALBANK	2,03,294	2.93
CANARA BANK	73,332	2.46
AUBANK	9,519	0.68

Source: BSE

\* TTQ - Total Quantity Traded, \*\* T/O – Turnover in Crores

### Period of the Study:

The study period belongs to five years starting from 2018 – 2019 to 2022 – 2023.

### Tools and Techniques Used:

In order to prove the efficiency of Banking Companies stock with S&P BSE Bankes index, tools and techniques like Descriptive Analysis, Correlation, Covariance analysis and Regression were used and interpreted.

## ANALYSIS AND INFERENCES

**Table 2: Descriptive Analysis**

	₹. In Crores									
	S&P BSE BANKEX	HDFC	SBIN	BANK BARODA	CAN BK	ICICI BANK	INDUSIN BNK	FEDERAL BNK	KOTAK BANK	AU BANK
Mean Value	35672.01	1600.46	362.6	102.29	207.41	550.72	1169.74	88.47	1589.10	805.56
Standard Error	912.57	51.61	15.70	4.60	8.63	26.06	53.25	2.89	33.97	32.95
Median	35285.52	1500.00	331.0	101.85	220.85	514.00	1100.00	87.80	1650.00	692.95
Standard Deviation	7127.37	403.12	122.6	35.93	67.44	203.55	415.86	22.58	265.33	257.33
Kurtosis	-0.87	-0.68	-1.00	-0.46	-0.91	-1.23	-0.55	0.35	-1.13	-0.74
Skewness	0.00	0.46	0.33	0.19	-0.30	0.37	0.16	0.17	-0.23	0.79
Range	27464.95	1581.20	451.0	146.80	249.65	681.00	1615.75	98.95	1000.00	984.00

Source – Author Compilation

Table 2 shows descriptive analysis of Top Performing Banks in India. It reflects the Mean Value, Median, Standard Deviation, Range, Kurtosis and Skewness measure for measuring probability of the data. Mean value was higher in HDFC Bank with the value of 1600.46 Crores. Standard Error was higher in IndusInd Bank with the value of 53.25 Crores. Median and Standard deviation was higher in Kotak Bank with the value of 1650.00 and 265.33 crores. Skewness and Kurtosis probability measurements showed only negative values for all the banks. Range value of the Banking companies was higher in IndusInd bank with the value of 1615.75 crores. Higher standard deviation has been observed in S&P BSE Bankex which shows the measurement of bank efficiency whereas remaining variables are showing less standard deviation as compare to S&P BSE Bankex. Positive means it is noticed for all the dependent and independent variable which is the indication of very less downfall in this period of study.

**Table 3: Correlation Analysis**

	S&P BSE BANKEX	HDFC	SBIN	BANK BARODA	CAN BK	ICICI BANK	INDUS INBNK	FEDERAL BNK	KOTAK BANK	AU BANK
S&P BSE BANKEX	1									
HDFC	-0.03	1								
SBIN	0.965	0.019	1							
BANK BARODA	0.514	0.565	0.578	1						
CAN BANK	0.445	0.695	0.515	0.952	1					
ICICI BANK	0.944	-0.262	0.936	0.335	0.23	1				
INDUSIN BNK	-0.01	0.805	-0.022	0.651	0.73	-0.307	1			
FEDERAL BANK	0.801	0.369	0.823	0.877	0.82	0.667	0.396	1		
KOTAK BANK	0.836	-0.334	0.730	0.042	-0.02	0.851	-0.350	0.414	1	
AU BANK	0.421	-0.218	0.356	-0.217	-0.19	0.392	-0.210	0.005	0.591	1

Source – Author Compilation

**H<sub>0</sub>: There is a statically significant relationship between S&P BSE Bankex and the performance of selected banks of India.**

The results of Correlation Analysis were given in Table 3 above. As per the evaluation, All the top performing banks were correlated with S&P BSE Bankex Index and it was found that State Bank of India's shares were highly correlated with Bankex with the value of 0.965 followed by ICICI Bank with the value of 0.944 and Kotak Bank with the score of 0.836. These scores are symbolizing that State Bank of India, ICICI and Kotak Bank were highly correlated with Bankex Index and implied that there is no significant difference between Bankex and Top Volumes of the companies. But HDFC Bank and

IndusInd Bank were negatively correlated with Bankex Index with the value of -0.03 and -0.01 respectively. It implied that there is a significant difference between top volumes of banking companies and Bankex Index. Overall top performing companies are highly correlating with S&P BSE Bankex, and the performance is good. Based on the analysis it was found that when the investor investing in Banking companies, they can get a guaranteed return. Hence we are accepting null hypothesis i.e there is a statically significant relationship between S&P BSE Bankex and the performance of selected banks of India.

**Table 4: Covariance Analysis**

	S&P BSE BANKE	HDFC	SBIN	BANKB ARODA	CAN BK	ICICIBA NK	INDUSIN BNK	FEDERA LBNK	KOTAK BANK	AU BANK
S&P BSE BANKEX	4996									
HDFC	-8098	15984								
SBIN	829653	906	1479							
BANK BARODA	129391	8046	2507	1270						
CANBK	210576	18584	4188	2270	4473					
ICICI BANK	134691	-2114	2299	2408	3196	40754				
INDUSIN BNK	-53762	13268	-111	9567	20271	-25526	170105			
FEDERAL BNK	126781	3305	2242	700	1240	3013	3657	501		
KOTAK BANK	155555	-3510	2337	392	-492	45219	-37937	2441	69244	
AUBANK	759518	-2229	1105	-1970	-3279	20196	-22122	29	39678	65132

Source – Author Compilation

**Ho: There is a statically significant relationship between S&P BSE Bankex and the performance of selected banks of India.**

In Table 4 - Co variance analysis of top performing Banking companies and BSE Bankex index was compared. Among all the nine top banks State Bank of India's performance is highly reliable with the score of ₹. 829653 Crores. Next reliable banking company is AU Small finance Bank with the score of ₹. 759518 crores. Comparatively IndusInd Bank and HDFC bank were not reliable to compare with Banking companies Index and their values are negative such as ₹. -53762 crores and ₹. – 8098 crores respectively. The reason behind the shortfall of HDFC is HDFC bank merged with HDFC Housing Loan and the management's guidance on key metrics including margins and net worth turned investors down as HDFC Bank shares fell amid strong volume action. On the whole it was observed that S&P BSE Bankex is highly associated with most of the top performing banks in India. It implies that there is an association between S&P BSE Bankex and other top performing banks, even if the investors are preferring the investment in Banking companies with top volume they can get a better return on these companies hence we are accepting our null hypothesis i.e There is a statically significant relationship between S&P BSE Bankex and the performance of selected banks of India.

**Table 5: Regression Analysis**

Regression Statistics	
Multiple R	1.00
R Square	0.99
Adjusted R Square	0.99
Standard Error	695.27
Observations	61.00

Source – Author Compilation

The S&P BSE Bankex and Top performing banking companies have a perfect linear relationship, as indicated by a multiple R of 1. The square root of R-squared is multiple R. The multiple R in table 5 above is 1.00, indicating a rather high linear correlation between the BSE Bankex Index and the performance of Top Banks. Since the R square is greater than 90%, this model is trustworthy and can be accepted. i.e. 99%.

**Table 6: P – Values of Top Performing Companies**

	<b>Coefficients</b>	<b>Standard Error</b>	<b>t Stat</b>	<b>P-value</b>
<b>Intercept</b>	1538.28	986.78	1.56	0.13
<b>HDFC</b>	1.57	0.45	3.45	0.00***
<b>SBIN</b>	6.65	5.04	1.32	<b>0.19</b>
<b>BANKBARODA</b>	10.46	11.12	0.94	<b>0.35</b>
<b>CANBK</b>	-7.02	6.33	-1.11	<b>0.27</b>
<b>ICICIBANK</b>	21.30	3.43	6.22	0.00***
<b>INDUSINBNK</b>	2.82	0.59	4.78	0.00***
<b>FEDERALBNK</b>	35.36	16.67	2.12	0.04***
<b>KOTAKBANK</b>	6.48	0.94	6.90	0.00***
<b>AUBANK</b>	1.42	0.57	2.49	0.02***

Level of Significance: 0.05

Source – Author Compilation

The P-value in the above table indicates whether the association seen in the particular sample also exists in the wider population. There is enough proof to say that the regression model fits the data more accurately than the model with no predictor variables if the p-value is less than 0.05. This result is advantageous since it shows that the predictor variables in the model actually enhance model fit. SBI, Canara Bank, and Bank of Baroda are the only three businesses whose closing prices and top volumes can be reliably compared to the S&P Bankex Index. Whereas the P-value for the following companies is below the standard significance level of 0.05 in HDFC, ICICI, IndusInd Bank, Federal Bank, Kotak Bank, and AU Small Finance Bank Companies. This demonstrates the statistical significance of the regression model as a whole, i.e., that the model fits the data more accurately than the model with no predictor variables.

**Table 7: Comparison of Total Expected Returns and Risk Free Return**

	<b>S&amp;P BSE BANKEX</b>	<b>HDFC</b>	<b>SBIN</b>	<b>BANK BARO</b>	<b>CANBK</b>	<b>ICICI BANK</b>	<b>INDUS INBNK</b>	<b>FEDERAL BNK</b>	<b>KOTAK BANK</b>	<b>AU BANK</b>
<b>Total expected Return</b>	2142921	<b>89736.25</b>	15871.65	98.4	6389	27322	63555.25	-692.6	<b>89890.2</b>	42512.35
<b>Average Return</b>	35129.85	<b>1471.08</b>	260.19	1.613	104.73	447.90	1041.88	-11.3541	<b>1473.61</b>	696.92
<b>Risk Free Rate</b>	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
<b>Total Return</b>	35029.85	<b>1371.09</b>	160.19	-98.39	4.74	347.90	941.89	-111.35	<b>1373.61</b>	596.92

Source – Author Compilation

It was observed from the above table that all the top performing banks top volumes are compared with S&P BSE Bankex Index. In Table 7, total expected returns for all the companies were given and highest value secured by Kotak Bank with the score of ₹. 89890.2 crores followed by HDFC Bank with the score of ₹. 89736.25 crores. Federal Bank's total expected return showed a negative value of ₹. -692.6 crores. Average return for the top performing banks resembles that Kotak and HDFC banks leading the market with the score of ₹. 1473.61 crores and ₹. 1471.08 crores

respectively. Risk free rate considered for the study is ₹. 3, comparatively total return for all the banking companies were computed and the score was higher for Kotak bank and HDFC Bank such as ₹. 1373.61 crores and ₹.1371.09 crores. It was observed that Bank of Baroda and Federal bank were scored negative scores in Total return calculation such as ₹. -98.39 crores and ₹.-111.35 crores. On the whole, if an investor invests in top performing Banking companies, they can get a guaranteed return in this industry.

## SUGGESTIONS

- 1) In comparison to other investment possibilities, banking business shares are regarded as dependable income generating units. An investor with an interest in the banking sector will receive greater and guaranteed returns.
- 2) Banking companies are regarded as the greatest option for long-term growth potential as it is a safe investment option available with investors.
- 3) Banking firms are the finest option if an investor is looking for a dividend and yield from investments.
- 4) The investor who decides to invest in the portfolio of a bank has the option of diversifying his holdings to lower the risk of the entire portfolio.
- 5) The growth potential of Banking company shares are strong, so it is suggested to go with banking companies than any other choice.

## CONCLUSION

The banking sector is essential to how the economy operates. For all investors looking to invest in it, the sector's rise is a blessing. The likelihood of a favorable return is very high in the banking sector or financial sector as a whole given its great performance over the previous several years. A more positive prognosis for banks is also a result of increasing interest rates, stricter rules, and low-yielding goods. It has advanced, becoming one of the market's top performers, thanks in part to the cyclical nature of this business and a stronger economy. Portfolio analysis of Banking companies create a confidence to entire securities market operations; further motivates to participate socio economic development activities.

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